

**REMARKS**

Claims 1-5 and 7-9 are pending in this application. By this Amendment, claim 1 is amended, and claims 10-12 are canceled without prejudice to or disclaimer of the subject matter recited therein.

Applicant filed an Information Disclosure Statement, with the Application on October 17, 2003 but has not received an initialed copy of Form PTO-1449. The Examiner is requested to consider the disclosed information and return the initialed copy of Form PTO-1449 in the next Office Action.

The Office Action provisionally rejects claims 1-12 under the judicially created doctrine of obviousness-type double patenting over the claims of co-pending Applications No. 10/667,347, 10/657,108 and 10/654,432. This rejection is respectfully traversed.

First, Applicants respectfully submit that Application No. 10/657,108 is the instant application. Therefore, the claims of this application cannot be rejected for double patenting over themselves. In addition, claims 10-12 are canceled. Therefore, the rejection of these claims is moot.

Next, the Office Action states "Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in present application are similar to claims in co-pending application as shown " (emphasis added). Applicant respectfully submits that similarity is not a proper basis for the obviousness-type double patenting rejection. The Patent Office must state how the differences between the claims of the application and the claims of the co-pending applications are obvious from the claims of the co-pending application.

Moreover, Applicant respectfully submits that the claims of this application are patentably distinct from the claims of Applications No. 10/667,347 and 10/654,432 as each is drawn to different features. For example, claim 1 recites that an edge of the ground pattern,

which is adjacent to the planar pattern, is straight, and that the ground pattern and the planar element are formed in or on a board without overlapping each other. These features are not obvious from the claims of the co-pending applications.

To require anything further at this point is premature as none of the applications have been allowed.

The Office Action rejects claims 1-5, 7-9 and 12 under 35 U.S.C. §102(e) over admitted prior art (Admission) in Figs. 16E and 16I. This rejection is respectfully traversed.

Claim 1 recites that the ground pattern and the planar element are formed in or on a board without overlapping each other. This feature is shown in Fig. Figs. 11A and 11B. To do so, the volume for the antenna can be reduced and the bandwidth of the antenna can be expanded.

As described at page 1, lines 27-28 of the specification, the antenna 1006 is erected vertically to a reflection surface 1007. Page 2, lines 24-25 of the specification describes that an element 1014 is erected vertically to the earth plate 1011. That is, the antenna 1006 is perpendicular to the reflection surface 1007, and the element 1014 is perpendicular to the earth plate 1011. Therefore, the alleged Admission does not teach or suggest that the ground pattern and the planar element are formed in or on a board without overlapping each other.

Accordingly, Applicant respectfully submits that claim 1 is patentably distinct from the applied art.

Claims 2-5 and 7-9 are allowable at least for their dependence on allowable claim 1, as well as for the additional features they recite. The rejection of claim 12 is moot because claim 12 is canceled by this Amendment.

Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action rejects claim 1 under 35 U.S.C. §102(e) over U.S. Patent No. 6,590,545 to McCorkle. This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, that an edge of the ground pattern, which is adjacent to the planar pattern, is straight. This feature is shown in Fig. 1A for example.

The Office Action alleges that a driven element 110 corresponds to the recited planer pattern. McCorkle does not teach or suggest that an edge of the ground section 105, which is adjacent to the driven element, i.e., a line facing a clearance area 115, is straight, as recited in claim 1.

Accordingly, Applicants respectfully submit that claim 1 is patentably distinct from McCorkle and requests withdrawal of the rejection.

The Office Action rejects claim 11 under 35 U.S.C. §102(e) over Admission or U.S. Patent No. 6,603,429 to Bancroft et al. (Bancroft). This rejection is moot because claim 11 is canceled by this Amendment. As such, withdrawal of the rejections is respectfully requested.

The Office Action rejects claim 10 under 35 U.S.C. §103(a) over Bancroft in view of U.S. Patent No. 6,707,427 to Konishi et al. This rejection is moot because claim 10 is canceled by this Amendment. As such, withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claim 1-5 and 7-9 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Robert A. Miller  
Registration No. 32,771

JAO:KXH/tls

Date: October 7, 2005

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--